PART 70 OPERATING PERMIT
OFFICE OF AIR MANAGEMENT
and
Vigo County Air Pollution Control

Gartland Foundry Company
330 Grant Street
Terre Haute, Indiana 47802

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T167-5998-00007	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and Vigo County Air Pollution Control. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a grey iron foundry for the manufacture of iron castings.

Responsible Official:	William Grimes
Source Address:	330 Grant Street, Terre Haute, Indiana 47802
Mailing Address:	PO Box 1564, Terre Haute, Indiana 47808
Phone Number:	(812) 232-0226
SIC Code:	3321
County Location:	Vigo County
County Status:	Maintenance Attainment for Sulfur Dioxide (SO_2) Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD Rules;

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(1) One (1) Cupola, identified as EU110, with a maximum capacity of 11.2 tons of metal per hour, using scrubber identified as SCR for control, and exhausting to stack SC-1.

(2) Two (2) Electric Induction Furnaces as follows:

(a) EU130, consisting of induction furnace #3, with a maximum capacity of 5.5 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(b) EU140, consisting of induction furnace #4, with a maximum capacity of 5.5 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(3) One (1) electrostatic spray booth, identified as prime paint line EU710, with a maximum capacity of 500 grey iron castings per hour, with dry filters for control of particulate matter overspray, and exhausting to stack SC-6.

(4) Sand handling systems including:

(a) Sand Muller, identified as EU591, with a maximum capacity of 100 tons per hour, and sand conveyor, identified as EU592, using baghouse BH5 for control, and exhausting to stack SC-7.

(b) Casting shakeout, identified as EU570, with a maximum capacity of 8 tons per hour, using baghouse BH3 for control, and exhausting to stack SC-4.

(c) Mold making process including a mold making muller (EU510), six (6) squeezer mold machines (EU520), four (4) rotolift mold machines (EU521), auto mold machine (EU530), and another auto mold machine (EU531), utilizing no control, and exhausting to SU-INT6/7/8/13.

(d) One (1) Waste sand handling system, identified as EU760, with a maximum capacity of 2.2 tons per hour of sand, exhausting to stack SU-INT12.

(e) One (1) Shaker/Sorter unit, identified as EU580, with a maximum capacity of 8.0 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(5) One (1) Scrap/Charge Handling operation for the cupola furnace, identified as EU100, with a maximum capacity of 19 tons of metal per hour, and exhausting as fugitive emissions FG-1.

(6) One (1) Scrap/Charge Handling operation for the electric induction furnaces, identified as EU120, with a maximum capacity of 19 tons of metal per hour, and exhausting as fugitive emissions FG-1.

(7) Casting Finishing:

(a) One (1) Spin Blast, identified as EU610, with a maximum capacity of 5 tons per hour of metal castings, using baghouse BH2 for control and exhausting to stack SC-2.

(b) One (1) Tumble Blast, identified as EU620, with a maximum capacity of 5 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(c) One (1) Tumbler, identified as EU630, with a maximum capacity of 1 ton per hour of metal castings using baghouse BH5 for control and exhausting to stack SC-7.

(d) Four (4) Snag Grinders, identified as EU640, each with a maximum capacity of 2 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(e) Six (6) Finish Grinders, identified as EU650, each with a maximum capacity of 2 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(8) Core making systems including:

(a) Three (3) Shell Core Machines, identified as EU320, EU321, and EU322 each with a maximum capacity of 1 ton per hour of sand, utilizing no controls and exhausting inside the source;

(b) Three (3) Isocure Core machines and one sand mixer, the core machines are identified as EU220, EU221, and EU222 while the mixer is identified as EU210. Each core machine has a maximum capacity of 2 tons per hour of sand, utilizing no controls and exhausting inside the source;

(c) One (1) Oil Core Making Process, identified as EU410, utilizing a mixer and associated core boxes with a maximum capacity of 0.25 tons per hour of sand, utilizing no controls and exhausting inside the source; and

(d) Core Wash process, identified as EU730, with a maximum capacity of 1 ton per hour of sand, utilizing no controls and exhausting inside the source.

(9) Inoculation for Ductile Iron Production, with a maximum capacity of 10 tons of metal per hour, identified as EU150, utilizing a closed ladle for control, and exhausting to inside the source.

(10) Pouring, identified as EU540, with a maximum capacity of 18 tons of metal per hour each, and exhausting as fugitive emissions FG-INT1 (vented to interior). Pouring operations are conducted on the floor, sinto molding line, and beardsley molding line. The maximum pouring capacity of the floor, sinto molding line, and beardsley molding line is 11.2, 5.0, and 3.0 tons per hour of metal, respectively.

(11) Cooling, identified as EU550, with a maximum capacity of 18 tons of metal per hour each, and exhausting as fugitive emissions FG-INT1 (vented to interior). Cooling operations are conducted on the floor, sinto molding line, and beardsley molding line. The maximum cooling capacity of the floor, sinto molding line, and beardsley molding line is 11.2, 5.0, and 3.0 tons per hour of metal, respectively.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

This stationary source includes the following insignificant activities, as defined in 326 IAC 2-7-1 (21).

(1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) BTU per hour.

(2) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(3) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

(4) Closed loop heating and cooling systems.

(5) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(6) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(7) Heat exchanger cleaning and repair.

(8) Paved and unpaved roads and parking lots with public access.

(9) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(10) Filter or coalescer media change out.

(11) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C.

(12) A laboratory as defined in 326 IAC 2-7-1(20)(C).

(13) Other activities or categories not previously identified with emissions equal to or less than specific thresholds:
(a) Unit 780 - Storage Piles

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

(a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled “Permit Shield.”

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and VCAPC.

(b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source’s potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

(c) All terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by Vigo County Air Pollution Control (VCAPC).

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(b) The Permittee shall furnish to IDEM, OAM and VCAPC, within a reasonable time, any information that IDEM, OAM and VCAPC, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon request, the Permittee shall also furnish to IDEM, OAM and VCAPC, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM and VCAPC, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM and VCAPC, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAM and VCAPC, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM and VCAPC, upon request and shall be subject to review and approval by IDEM, OAM and VCAPC. IDEM, OAM and VCAPC, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

B.13 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM and VCAPC, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM
Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

VCAPC
Telephone Number: 812-462-3433
Facsimile Number: 812-462-3447

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAM and VCAPC, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAM and VCAPC, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

(a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.

(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:

(1) The applicable requirements are included and specifically identified in this permit; or

(2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM and VCAPC, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM and VCAPC, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM and VCAPC, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

within ten (10) calendar days from the date of the discovery of the deviation.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) An emergency as defined in 326 IAC 2-7-1(12); or

(3) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM and VCAPC, determine any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAM and VCAPC, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM and VCAPC, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM and VCAPC, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM and VCAPC, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM and VCAPC, on or before the date it is due.

(2) If IDEM, OAM and VCAPC, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM and VCAPC, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM and VCAPC, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM and VCAPC, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Operational Flexibility [326 IAC 2-7-20]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-1.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard

Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM and VCAPC, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

(1) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

(2) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(i) A brief description of the change within the source;

(ii) The date on which the change will occur;

(iii) Any change in emissions; and

(iv) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.22 Construction Permit Requirement [326 IAC 2]

A modification, construction, or reconstruction shall be approved if required by and in accordance with the applicable provisions of 326 IAC 2.

B.23 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM and VCAPC, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]

B.24 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The application which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAM and VCAPC, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM or VCAPC, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. The provisions of 326 IAC 9-1-2 are not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to

thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM and VCAPC.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM and VCAPC within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM and VCAPC, if the source submits to IDEM, OAM and VCAPC, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

(a) Has certified that all facilities at this source are in compliance with all applicable requirements; and

(b) Has submitted a statement that the Permittee will continue to comply with such requirements; and

(c) Will comply with such applicable requirements that become effective during the term of this permit.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety

(90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management

Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAM and VCAPC, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAM and VCAPC, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

(1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or

(2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

(3) A verification to IDEM, OAM and VCAPC, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM and VCAPC, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM and VCAPC upon request and shall be subject to review and approval by IDEM, OAM and VCAPC. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM and VCAPC, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM and VCAPC shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM and VCAPC within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM and VCAPC reserve the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM and VCAPC that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM and VCAPC may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

And

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM and VCAPC, on or before the date it is due.

C.20 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM and VCAPC may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM and VCAPC, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or VCAPC makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or VCAPC within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM and VCAPC, on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The

Emergency/Deviation Occurrence Report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

One (1) Cupola, identified as EU110, with a maximum capacity of 11.2 tons of metal per hour, using scrubber identified as SCR for control, and exhausting to stack SC-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2] [326 IAC 6-1-13] [326 IAC 11-1]

Pursuant to OP 07-3321-01-92, issued on January 1, 1992, the PM emissions from the foundry cupola shall be limited to 0.15 grains per dry standard cubic foot at an air flow rate of 20,000 cubic feet per minute. PM emissions from the cupola are also limited to 25.68 pounds per hour and 112.5 tons per year (based on a 12 month rolling total).

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

During the period between 6 and 12 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance.

D.1.4 Particulate Matter (PM)

The scrubber (SCR) for PM control shall be in operation at all times when the cupola is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

(a) Daily visible emission notations of the cupola scrubber stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the scrubber used in conjunction with the cupola, at least once per shift when the cupola is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 55.0 and 60.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and Vigo County Air Pollution Control and shall be calibrated at least once every six (6) months.

D.1.7 Scrubber Operation

The Permittee shall ensure a minimum scrubbing liquor flow rate of 500 gallons per minute or a flow rate established during the latest stack test, sufficient to maintain manufacturers specified efficiency of particulate matter removal. Additionally, the scrubber shall be in operation at all times when the cupola is in operation.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

(a) To document compliance with Condition D.1.1 and D.1.5, the Permittee shall maintain records of daily visible emission notations of the cupola scrubber stack exhaust.

(b) To document compliance with Condition D.1.6 and D.1.7, the Permittee shall maintain:
  (b) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    (a) Inlet and outlet differential static pressure; and
    (b) Scrubbing liquor flow rate.
  (c) Documentation of all response steps implemented, per event.
  (d) Operation and preventive maintenance logs, including work purchase orders, shall be maintained.
  (e) Quality Assurance/Quality Control (QA/QC) procedures.
  (f) Operators standard operating procedures (SOP).
  (g) Manufacturer's specifications or its equivalent.
  (h) Equipment "troubleshooting" contingency plan.
  (i) Documentation of the dates vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

A summary of the information to document compliance with Conditions D.1.5, D.1.6, and D.1.7 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, upon request.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Two (2) Electric Induction Furnaces as follows:

(a) EU130, consisting of induction furnace #3, with a maximum capacity of 5.0 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(b) EU140, consisting of induction furnace #4, with a maximum capacity of 5.0 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to OP 07-3321-03-95, issued on August 21, 1995, the particulate matter (PM) emissions from Electric Induction Furnaces #3 and #4 shall be limited to 0.02 grains per dry standard cubic foot at an air flow rate of 20,000 cubic feet per minute. PM is also limited to 2.98 pounds per hour, and 13.04 tons per year.

These limits also satisfy the requirements of 326 IAC 2-2, for minor modifications to a major PSD source.

D.2.2 Housekeeping

Pursuant to OP-07-3321-03-95, the charge materials for electric induction furnaces #3 and #4 shall be stored inside a building. Also, visible emissions from any building opening shall not exceed 20% opacity, as determined by 40 CFR 60 Appendix A, Method 9 and 326 IAC 5-1.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control device***s***.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

During the period between 6 and 12 months after issuance of this permit, the Permittee shall perform PM testing on each Electric Induction Furnace utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance.

D.2.5 Particulate Matter (PM)

Pursuant to OP-07-3321-03-95, issued on August 21, 1995, the baghouse for PM control shall be in operation and control emissions from the Electric Induction Furnaces #3 and #4 are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

(a) Daily visible emission notations of the Electric Induction Furnace stack (SC-2) exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.2.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse (BH1) used in conjunction with the Electric Induction Furnaces #3 and #4, at least once per shift when either Electric Induction Furnace is in operation and venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and VCAPC, and shall be calibrated at least once every six (6) months.

D.2.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the Electric Induction Furnace operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.2.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated processes will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.10 Record Keeping Requirements

(a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the Electric Induction Furnace stack exhaust.

(b) To document compliance with Condition D.2.1 and D.2.6, the Permittee shall maintain the following:
- (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
  - (A) Inlet and outlet differential static pressure; and
  - (B) Cleaning cycle: frequency and differential pressure.
- (2) Documentation of all response steps implemented, per event .
- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures.
- (5) Operator standard operating procedures (SOP).
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.

(b) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.11 Reporting Requirements

A summary of the information to document compliance with Conditions D.2.1, D.2.5, D.2.6, D.2.7, and D.2.8 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, upon request.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

One (1) electrostatic spray booth, identified as prime paint line EU710, with a maximum capacity of 500 grey iron castings per hour, with dry filters for control of particulate matter overspray, and exhausting to stack SC-6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-9] [326 IAC 2]

(a) The volatile organic compound (VOC) content of coating delivered to the applicator at Spray Booth EU710 shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.

(b) Any change or modification which may increase potential emissions to 25 tons per twelve (12) consecutive month period, from the equipment covered in Section D.5 of this permit, shall require prior approval from OAM and VCAPC before such change may occur.

D.3.2 Emission Minimization [326 IAC 8-2-9]

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.3.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM emissions from spray booth EU710 shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM and VCAPC, compliance with the VOC or PM limits specified in Condition D.3.1 and D.3.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.4.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the coating manufacturer. However, IDEM, OAM, and VCAPC reserve the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.3.7 Particulate Matter (PM)

The dry filters for PM overspray control from Spray Booth EU710 shall be in operation at all times when the spray booth is in operation and exhausting to the outside atmosphere.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.8 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray while the spray booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an overspray emission, or other noticeable change in overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.9 Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.3.1.
   (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
   (2) A log of the dates of use;
   (3) The volume weighted VOC content of the coatings used for each day;
   (4) The cleanup solvent usage for each day;
   (5) The total VOC usage for each day; and
   (6) The weight of VOCs emitted for each compliance period.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.10 Reporting Requirements

A summary of the information to document compliance with Conditions D.3.1,and D.3.8 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, upon request.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

1. Sand handling systems including:

   a. Sand Muller, identified as EU591, with a maximum capacity of 100 tons per hour, and sand conveyor, identified as EU592, using baghouse BH5 for control, and exhausting to stack SC-7.

   b. Casting shakeout, identified as EU570, with a maximum capacity of 8 tons per hour, using baghouse BH3 for control, and exhausting to stack SC-4.

   c. Mold making process including a mold making muller (EU510), six (6) squeezer mold machines (EU520), four (4) rotolift mold machines (EU521), auto mold machine (EU530), and another auto mold machine (EU531), utilizing no control, and exhausting to SU-INT6/7/8/13.

   d. One (1) Waste sand handling system, identified as EU760, with a maximum capacity of 2.2 tons per hour of sand, exhausting to stack SU-INT12.

   e. One (1) Shaker/Sorter unit, identified as EU580, with a maximum capacity of 8.0 tons per hour of metal castings, using baghouse BH5 for control, and exhausting to stack SC-7.

2. One (1) Scrap/Charge Handling operation for the cupola furnace, identified as EU100, with a maximum capacity of 19 tons of metal per hour, and exhausting as fugitive emissions FG-1.

3. One (1) Scrap/Charge Handling operation for the electric induction furnaces, identified as EU120, with a maximum capacity of 19 tons of metal per hour, and exhausting as fugitive emissions FG-1.

4. Casting Finishing:

   a. One (1) Spin Blast, identified as EU610, with a maximum capacity of 5 tons per hour of metal castings, using baghouse BH2 for control and exhausting to stack SC-2.

   b. One (1) Tumble Blast, identified as EU620, with a maximum capacity of 5 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

   c. One (1) Tumbler, identified as EU630, with a maximum capacity of 1 ton per hour of metal castings using baghouse BH5 for control and exhausting to stack SC-7.

   d. Four (4) Snag Grinders, identified as EU640, each with a maximum capacity of 2 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

   e. Six (6) Finish Grinders, identified as EU650, each with a maximum capacity of 2 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

5. Core making systems including:

   a. Three (3) Shell Core Machines, identified as EU320, EU321, and EU322 each with a maximum capacity of 1 ton per hour of sand, utilizing no controls and exhausting inside the source;

   b. Three (3) Isocure Core Machines and one sand mixer, the core machines are identified as EU220, EU221, and EU222 while the mixer is identified as EU210. Each core machine has a maximum capacity of 2 tons per hour of sand, utilizing no control and exhausting inside the source;

   c. One (1) Oil Core Making Process, identified as EU410, utilizing a mixer and associated core boxes with a maximum capacity of 0.25 tons per hour of sand, utilizing no controls and exhausting inside the source; and

   d. Core Wash Process, identified as EU730, with a maximum capacity of 1 ton per hour of sand, utilizing no controls and exhausting inside the source.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-3-2]

a. Pursuant to CP 167-V022-00007, issued on July 16, 1997, the particulate matter (PM) emissions from baghouse BH-5, controlling emissions from the sand muller, and sand conveyor, shall be limited to 0.0075 grains per dry standard cubic foot at an air flow rate of 50,000 cubic feet per minute. PM emissions are also limited to 3.21 pounds per hour, and 14.08 tons per year.

b. Pursuant to OP 07-3321-02-92, issued on January 1, 1992, the particulate matter (PM) emissions from BH3 controlling emissions from the shakeout operation shall be limited to 0.03 grains per dry standard cubic foot at an air flow rate of 22,500 cubic feet per minute, which is equivalent to 5.78 pounds per hour and 25.34 tons per year.

These limits also satisfy the requirements of 326 IAC 2-2, for minor modifications to a major PSD source.

D.4.2 Particulate Matter Limitation (PM) [326 IAC 6-3-2]

The particulate matter (PM) from the various facilities (other than those specifically limited by Condition D.4.1 above) shall be limited by the following equations (depending on process weight rate):

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM and VCAPC may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM and VCAPC, compliance with the particulate matter limit specified in Condition D.3.1 and D.3.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.4.5 Particulate Matter (PM)

(a) The baghouse (BH5) for PM control from the sand muller and sand conveyor shall be in operation at all times when the sand muller and sand conveyor are in operation.

(b) The baghouse (BH3) for PM control from the casting shakeout shall be in operation at all times when the casting shakeout system is in operation.

(c) The baghouse (BH2) for PM control from the spin blast shall be in operation at all times when the spin blast is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.6 Visible Emissions Notations

(a) Daily visible emission notations of the three baghouse (BH2, BH3, and BH5) exhausts shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.4.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with sand muller and sand conveyor, at least once per shift when the sand muller and sand conveyor are in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with casting shakeout, at least once per shift when the casting shakeout system is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the spin blast, at least once per shift when the spin blast is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 6.0 inches of water or a range established during the latest stack

test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and Vigo County Air Pollution Control and shall be calibrated at least once every six (6) months.

D.4.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the sand muller and sand conveyor when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

An inspection shall be performed each calender quarter of all bags controlling the casting shakeout when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

An inspection shall be performed each calender quarter of all bags controlling the spin blast when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.4.9 Broken Bag or Failure Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

(b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.10 Record Keeping Requirements

(a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the baghouses BH2, BH3 and BH5 stack exhausts.

(b) To document compliance with Condition D.4.1 and D.4.6, the Permittee shall maintain the following:
  (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
    (A) Inlet and outlet differential static pressure; and
    (B) Cleaning cycle: frequency and differential pressure.
  (2) Documentation of all response steps implemented, per event .
  (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  (4) Quality Assurance/Quality Control (QA/QC) procedures.
  (5) Operator standard operating procedures (SOP).
  (6) Manufacturer's specifications or its equivalent.
  (7) Equipment "troubleshooting" contingency plan.

(8) Documentation of the dates vents are redirected.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.11 Reporting Requirements

A summary of the information to document compliance with Conditions D.4.1, D.4.2 and D.4.6 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, upon request.

SECTION D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

1. Inoculation for Ductile Iron Production, with a maximum capacity of 10 tons of metal per hour, identified as EU150, utilizing a closed ladle for control, and exhausting to inside the source.

2. Pouring, identified as EU540, with a maximum capacity of 18 tons of metal per hour each, and exhausting as fugitive emissions FG-INT1 (vented to interior). Pouring operations are conducted on the floor, sinto molding line, and beardsley molding line. The maximum pouring capacity of the floor, sinto molding line, and beardsley molding line is 11.2, 5.0, and 3.0 tons per hour of metal, respectively.

3. Cooling, identified as EU550, with a maximum capacity of 18 tons of metal per hour each, and exhausting as fugitive emissions FG-INT1 (vented to interior). Cooling operations are conducted on the floor, sinto molding line, and beardsley molding line. The maximum cooling capacity of the floor, sinto molding line, and beardsley molding line is 11.2, 5.0, and 3.0 tons per hour of metal, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter Limitation (PM) [326 IAC 6-3-2]

The particulate matter (PM) from the various facilities (other than those specifically limited by Condition D.4.1 above) shall be limited by the following equations (depending on process weight rate):

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Compliance Determination Requirements

D.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test these facilities by this permit. However, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM and VCAPC, compliance with the particulate matter limit specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
VIGO COUNTY AIR POLLUTION CONTROL

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Gartland Foundry Company
Source Address: 330 Grant Street, Terre Haute, Indiana 47802
Mailing Address: PO Box 1564, Terre Haute, Indiana 47808
Part 70 Permit No.: T167-5998-00007

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT

COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

Vigo County Air Pollution Control
103 South 3rd Street
Terre Haute, Indiana 47807

Phone: 812-462-3433
Fax: 812-462-3447

PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Gartland Foundry Company
Source Address: 330 Grant Street, Terre Haute, Indiana 47802
Mailing Address: PO Box 1564, Terre Haute, Indiana 47808
Part 70 Permit No.: T167-5998-00007

This form consists of 2 pages **Page 1 of 2**

Check either No. 1 or No.2
9 1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(C) C The Permittee must submit notice in writing within ten (**10**) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
VIGO COUNTY AIR POLLUTION CONTROL

Part 70 Quarterly Report

Source Name: Gartland Foundry Company
Source Address: 330 Grant Street, Terre Haute, Indiana 47802
Mailing Address: PO Box 1564, Terre Haute, Indiana 47808
Part 70 Permit No.: T167-5988-00007
Facility: Cupola
Parameter: Particulate Matter
Limit: 112.5 tons per 12-month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
and
VIGO COUNTY AIR POLLUTION CONTROL

PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Gartland Foundry Company
Source Address: 330 Grant Street, Terre Haute, Indiana 47802
Mailing Address: PO Box 1564, Terre Haute, Indiana 47808
Part 70 Permit No.: T167-5998-00007

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviation**

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Management
and
Vigo County Air Pollution Control

Addendum to the
Technical Support Document for Part 70 Operating Permit

Source Name:	**Gartland Foundry Company**
Source Location:	**330 Grant Street, Terre Haute, Indiana 47802**
County:	**Vigo County**
SIC Code:	**3321**
Operation Permit No.:	**T167-5998-00007**
Permit Reviewer:	**Rob Harmon**

On February 14, 2000, Vigo County Air Pollution Control (VCAPC) had a notice published in the Terre Haute Tribune-Star, Terre Haute, Indiana, stating that Gartland Foundry Company had applied for a Part 70 Operating Permit to operate a grey iron foundry. The notice also stated that OAM and VCAPC proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On March 14, 2000, August Mack Environmental, Inc. (August Mack) submitted comments on the proposed Part 70 permit on behalf of Gartland Foundry Company. The summary of the comments is as follows (with additions identified as redline and deletions identified by ~~strikeout~~):

Comment 1:

They asked for the descriptions in Condition A.2 (and elsewhere) be modified to the following:

(1) One (1) Scrap/Charge Handling operation for the cupola furnace, identified as EU100, with a maximum capacity of 19 tons of metal per hour, and exhausting as fugitive emissions FG-1.

(2) One (1) Cupola, identified as EU110, with a maximum capacity of 11.2 tons of metal per hour, using scrubber SCR for control and exhausting to stack SC-1.

(3) One (1) Scrap/Charge Handling operation for the electric induction furnaces, identified as EU120, with a maximum capacity of 19 tons of metal per hour, and exhausting as fugitive emissions FG-1.

(4) Two (2) Electric Induction Furnaces:

  (1) Electric Induction Furnaces #1 and #2 were removed.

  (2) EU130 consisting of electric induction furnace #3, with a maximum capacity of 5.0 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

  (3) EU140 consisting of electric induction furnace #4, with a maximum capacity of 5.0 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(5) Inoculation for Ductile Iron Production, with a maximum capacity of 10 tons of metal per hour, identified as EU150, using a closed ladle for control, and exhausting inside the source.

(6) Pouring, identified as EU540, with a maximum capacity of 18 tons of metal per hour each, and

exhausting as fugitive emissions FG-INT1 (vented to interior). Pouring operations are conducted on the floor, sinto molding line, and beardsley molding line. The maximum pouring capacity of the floor, sinto molding line, and beardsley molding line is 11.2, 5.0, and 3.0 tons per hour of metal respectively.

(7) Cooling, identified as EU550, with a maximum capacity of 18 tons of metal per hour each, and exhausting as fugitive emissions FG-INT1 (vented to interior). Cooling operations are conducted on the floor, sinto molding line and beardsley molding line. The maximum cooling capacity of the floor, sinto molding line, and beardsley molding line is 11.2, 5.0, and 3.0 tons per hour of metal, respectively.

(8) Sand Handling System: (please add or modify the following)

(1) Casting shakeout, identified as EU570, with a maximum capacity of 8 tons per hour of metal castings, using baghouse BH3 for control and exhausting to stack SC-4.

(2) Add an additional Rotolift mold machine to the description of the mold making process.

(3) One (1) Shaker/Sorter unit, identified as EU580, with a maximum capacity of 8.0 tons per hour of metal castings, using baghouse BH5 for control, and exhausting to stack SC-7.

(4) One (1) Waste Sand Handling operation, identified as EU760, with a maximum capacity of 2.2 tons per hour of sand, exhausting to stack SU-INT12.

(5) The maximum capacity of the Sand Muller should be changed from 45 tons per hour to 100 tons per hour.

(9) Casting Finishing:

(1) One (1) Spin Blast, identified as EU 610, with a maximum capacity of 5 tons per hour of metal castings, using baghouse BH2 for control and exhausting to stack SC-2.

(2) One (1) Tumble Blast, identified as EU 620, with a maximum capacity of 5 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(3) One (1) Tumbler, identified as EU630, with a maximum capacity of 1 ton per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(4) Four (4) Snag Grinders, identified as EU640, each with a maximum capacity of 2 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(5) Six (6) Finish Grinders, identified as EU650, each with a maximum capacity of 2 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(10) Core Making:

(1) Three (3) Shell Core Machines, identified as EU320, EU321, and EU322 each with a maximum capacity of 1 ton per hour of sand, utilizing no controls and exhausting inside the source.

(2) Three (3) Isocure Core Machines and one sand mixer, the core machines are identified as EU220, EU221, and EU222 while the mixer is identified as EU210 each core machine has a maximum capacity of 2 tons per hour of sand, utilizing no controls and exhausting inside the source.

(3) One (1) Oil Core Making Process, identified as EU410, utilizing a mixer and associated core boxes with a maximum capacity of 0.25 tons per hour of sand, utilizing no controls and exhausting inside the source.

(4) Core Wash Process, identified as EU730, with a maximum capacity of 1 ton per hour of sand, utilizing no controls and exhausting inside the source. Please delete the Tower core oven.

Response to Comment 1:
The descriptions provided under A.2 (and those corresponding descriptions in the respective D Sections) have been upgraded as follows:

(1) One (1) Cupola, identified as EU110, with a maximum capacity of 11.2 tons of metal per hour, using scrubber identified as SCR for control, and exhausting to stack SC-1.

(2) Two (2) ~~Four (4)~~ Electric Induction Furnaces as follows:

~~(a) EU120, consisting of induction furnaces #1 and #2, with a combined maximum capacity of 2.1 tons of metal per hour, with no control, and exhausting to stack SU-INT1.~~

~~(b)~~(a) EU130, consisting of induction furnace #3, with a maximum capacity of 5.0 ~~5.5~~ tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

~~(c)~~(b) EU140, consisting of induction furnace #4, with a maximum capacity of 5.0 ~~5.5~~ tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(3) One (1) electrostatic spray booth, identified as prime paint line EU710, with a maximum capacity of 500 grey iron castings per hour, with dry filters for control of particulate matter overspray, and exhausting to stack SC-6.

(4) Sand handling systems including:

(a) Sand Muller, identified as EU591, with a maximum capacity of 100 ~~45~~ tons per hour, and sand conveyor, identified as EU592, using baghouse BH5 for control, and exhausting to stack SC-7.

(b) Casting shakeout, identified as EU570, with a maximum capacity of 8 ~~2~~ tons per hour, using baghouse BH3 for control, and exhausting to stack SC-4.

(c) Mold making process including a mold making muller (EU510), six (6) squeezer mold machines (EU520), four (4) ~~three (3)~~ rotolift mold machines (EU521), auto mold machine (EU530), and another auto mold machine (EU531), utilizing no control, and exhausting to SU-INT6/7/8/13.

(d) One (1) Waste sand handling system ~~(EU760)~~ , identified as EU760, with a maximum capacity of 2.2 tons per hour of sand, exhausting to stack SU-INT12.

(e) One (1) Shaker/Sorter unit, identified as EU580, with a maximum capacity of 8.0 tons per hour of metal castings, using baghouse BH5 for control, and exhausting to stack SC-7.

(5) One (1) Scrap/Charge Handling operation for the cupola furnace, identified as EU100, with a maximum capacity of 19 tons of metal per hour, and exhausting as fugitive emissions FG-1.

(6) One (1) Scrap/Charge Handling operation for the electric induction furnaces, identified as EU120, with a maximum capacity of 19 tons of metal per hour, and exhausting as fugitive emissions FG-1.

~~(5) Charge handling for melting furnaces (EU120).~~

(7) Casting Finishing:

(a) One (1) Spin Blast, identified as EU610, with a maximum capacity of 5 tons per hour of metal castings, using baghouse BH2 for control and exhausting to stack SC-2.

(b) One (1) Tumble Blast, identified as EU620, with a maximum capacity of 5 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(c) One (1) Tumbler, identified as EU630, with a maximum capacity of 1 ton per hour of metal castings using baghouse BH5 for control and exhausting to stack SC-7.

(d) Four (4) Snag Grinders, identified as EU640, each with a maximum capacity of 2 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

(e) Six (6) Finish Grinders, identified as EU650, each with a maximum capacity of 2 tons per hour of metal castings, using baghouse BH5 for control and exhausting to stack SC-7.

~~(6)~~(8) Core making systems including:

(a) ~~Shell core making (EU320);~~ Three (3) Shell Core Machines, identified as EU320, EU321, and EU322 each with a maximum capacity of 1 ton per hour of sand, utilizing no controls and exhausting inside the source;

(b) ~~Isocure core making including mixers (EU210) and machines (EU220 and EU221);~~ Three (3) Isocure Core Machines and one sand mixer, the core machines are identified as EU220, EU221, and EU222 while the mixer is identified as EU210. Each core machine has a maximum capacity of 2 tons per hour of sand, utilizing no controls and exhausting inside the source;

(c) ~~Oil core making (EU410);~~ One (1) Oil Core Making Process, identified as EU410, utilizing a mixer and associated core boxes with a maximum capacity of 0.25 tons per hour of sand, utilizing no controls and exhausting inside the source; and

(d) ~~Core wash and Tower core oven (EU730).~~ Core Wash Process, identified as EU730, with a maximum capacity of 1 ton per hour of sand, utilizing no controls and exhausting inside the source.

(9) Inoculation for Ductile Iron Production, with a maximum capacity of 10 tons of metal per hour, identified as EU150, utilizing a closed ladle for control, and exhausting to inside the source.

(10) Pouring, identified as EU540, with a maximum capacity of 18 tons of metal per hour each, and exhausting as fugitive emissions FG-INT1 (vented to interior). Pouring operations are conducted on the floor, sinto molding line, and beardsley molding line. The maximum pouring capacity of the floor, sinto molding line, and beardsley molding line is 11.2, 5.0, and 3.0 tons per hour of metal, respectively.

(11) Cooling, identified as EU550, with a maximum capacity of 18 tons of metal per hour each, and exhausting as fugitive emissions FG-INT1 (vented to interior). Cooling operations are conducted on the floor, sinto molding line, and beardsley molding line. The maximum cooling capacity of the floor, sinto molding line, and beardsley molding line is 11.2, 5.0, and 3.0 tons per hour of metal, respectively.

~~(7) Pouring (EU540) and Cooling (EU550) processed metal, using no control, and exhausting to FG-INT1.~~

~~(8) Inoculation process, identified as EU140, utilizing no control, and exhausting to SU-INT2.~~

Comment 2:

They asked for all the insignificant activities listed in the Technical Support Document (TSD) of the draft permit be added to section A.3 of the permit.

Response to Comment 2:

Condition A.3 of the permit has been renamed “Insignificant Activities” and the test of the condition has been replaced with the following language:

This stationary source ~~does not currently have any~~ includes the following insignificant activities, as defined in 326 IAC 2-7-1 (21) ~~that have applicable requirements~~.

(1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) BTU per hour.

(2) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(3) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

(4) Closed loop heating and cooling systems.

(5) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(6) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(7) Heat exchanger cleaning and repair.

(8) Paved and unpaved roads and parking lots with public access.

(9) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(10) Filter or coalescer media change out.

(11) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C.

(12) A laboratory as defined in 326 IAC 2-7-1(20)(C).

(13) Other activities or categories not previously identified with emissions equal to or less than specific thresholds:
(a) Unit 780 - Storage Piles

Comment 3:

They asked for Section D to be modified to reflect the changes made in Section A.2.

Response to Comment 3:

All of the description changes that were incorporated into Condition A.2 were passed through to the respective Section D descriptions as well.

Comment 4:

They asked for emission calculations for each emission unit.

Response to Comment 4:

The calculations were developed and included in an attached 14 page Appendix A.

Comment 5:

They asked for HAP emission calculations that indicate that Gartland Foundry is a major source for air toxics.

Response to Comment 5:

The calculations which were performed did not substantiate the assertion that Gartland Foundry was a major source for HAPs. This reference was deleted from the Source Status portion of Condition A.1.

Comment 6:

They asked for a chance to review the draft permit after the previous modification are incorporated prior to the permit being finalized so that the appeal process might be avoided if further modifications are required.

Response to Comment 6:

Gartland Foundry will be sent a copy of the Proposed Permit package (including this addendum) at the same time it is forwarded to the US EPA for the 45 day review period.

Upon further review, OAM and VCAPC have made the following changes to the final Part 70 permit (changes are bolded for emphasis).

1. As a result of the additions to the descriptions in Section A.2, several conditions in Section D.4 need upgraded to include baghouse BH2. The affected conditions are D.4.5, D.4.6, D.4.7, D.4.8 and D.4.10. The changes are as follows:

   a. The following has been added to the end of Condition D.4.5. Additionally, lettering has been added to make the condition more clear as follows:

      (a) The baghouse (BH5) for PM control from the sand muller and sand conveyor shall be in operation at all times when the sand muller and sand conveyor are in operation.

(b) The baghouse (BH3) for PM control from the casting shakeout shall be in operation at all times when the casting shakeout system is in operation.

(c) The baghouse (BH2) for PM control from the spin blast shall be in operation at all times when the spin blast is in operation.

b. The following changes have been made to Condition D.4.6(a).

Daily visible emission notations of the ~~two Baghouse BH3 and BH5~~ three baghouse (BH2, BH3, and BH5) exhausts shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

c. The following has been added to Condition D.4.7.

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the spin blast, at least once per shift when the spin blast is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

d. The following has been added to the end of Condition D.4.8.

An inspection shall be performed each calender quarter of all bags controlling the spin blast when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

e. The following changes have been made to Condition D.4.10(a).

To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the baghouses BH2, BH3 and BH5 stack exhausts.

2. As a result of the removal of Electric induction Furnaces #1 and #2, Condition D.2.1 has been updated as follows:

~~(a) Pursuant to OP 07-3321-01-92, issued on January 1, 1992, the particulate matter (PM) emissions from Electric Induction Furnace #1 and #2 shall be limited to 0.07 grains per dry standard cubic foot. PM emissions are also limited to 3.15 pounds per hour, and 13.80 tons per year, with an emission factor of 1.5 pound of PM per ton of grey iron produced.~~

~~(b)~~ Pursuant to OP 07-3321-03-95, issued on August 21, 1995, the particulate matter (PM) emissions from Electric Induction Furnaces #3 and #4 shall be limited to 0.02 grains per dry standard cubic foot at an air flow rate of 20,000 cubic feet per minute. PM is also limited to 2.98 pounds per hour, and 13.04 tons per year.

This limit ~~These limits~~ also satisfy the requirements of 326 IAC 2-2, for minor modifications to a major PSD source.

3. Condition D.2.4 has been updated to more specifically indicate which units are to be tested. The

Condition now reads as follows:

During the period between 6 and 12 months after issuance of this permit, the Permittee shall perform PM testing on each Electric Induction Furnace utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance.

4. Condition D.2.8 had an incorrect description which has been updated as follows:

An inspection shall be performed each calender quarter of all bags controlling the Electric Induction Furnace ~~woodworking~~ operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

Additionally, VCAPC made the following changes as a result of standard language changes within Indiana.

1. As part of the U.S. EPA's 1997 Compliance Assurance Monitoring rule making (Federal Register Volume 62, page 54900-54947, Wednesday, October 22, 1997), the language in 40 CFR Part 70.6(c)(5)(iii)(B)) was changed from "continuous or intermittent compliance" to "based on continuous or intermittent data" The U.S. District Court of Appeals, Washington D.C. ruled against EPA's language, saying that the Clean Air Act wording of continuous or intermittent compliance had to be used. (NRDC vs. EPA, #97-1727) This change has been made to this permit to be consistent with state and federal law.

Indiana Department of Environmental Management
Office of Air Management
and
Vigo County Air Pollution Control

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	**Gartland Foundry Company**
Source Location:	**330 Grant Street, Terre Haute, Indiana 47802**
County:	**Vigo County**
SIC Code:	**3321**
Operation Permit No.:	**T167-5998-00007**
Permit Reviewer:	**Rob Harmon**

The Office of Air Management (OAM) and Vigo County Air Pollution Control (VCAPC) have reviewed a Part 70 permit application from Gartland Foundry Company relating to the operation of a grey iron foundry for the manufacture of iron castings.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(1) One (1) Cupola, identified as EU110, with a maximum capacity of 11.2 tons of metal per hour, using scrubber identified as SCR for control, and exhausting to stack SC-1.

(2) Four (4) Electric Induction Furnaces as follows:

(a) EU120, consisting of induction furnaces #1 and #2, with a combined maximum capacity of 2.1 tons of metal per hour, with no control, and exhausting to stack SU-INT1.

(b) EU130, consisting of induction furnace #3, with a maximum capacity of 5.5 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(c) EU140, consisting of induction furnace #4, with a maximum capacity of 5.5 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(3) One (1) electrostatic spray booth, identified as prime paint line EU710, with a maximum capacity of 500 grey iron castings per hour, with dry filters for control of particulate matter overspray, and exhausting to stack SC-6.

(4) Sand handling systems including:

(a) Sand Muller, identified as EU591, with a maximum capacity of 45 tons per hour, and sand conveyor, identified as EU592, using baghouse BH5 for control, and exhausting to stack SC-7.

(b) Casting shakeout, identified as EU570, with a maximum capacity of 2 tons per hour, using baghouse BH3 for control, and exhausting to stack SC-4.

(c) Mold making process including a mold making muller (EU510), six (6) squeezer mold machines (EU520), three (3) rotolift mold machines (EU521), auto mold machine (EU530), and another auto mold machine (EU531), utilizing no control, and exhausting to SU-INT6/7/8/13.

(d) Waste sand handling system (EU760).

(5) Charge handling for melting furnaces (EU120).

(6) Core making systems including:

(a) Shell core making (EU320);

(b) Isocure core making including mixers (EU210) and machines (EU220 and EU221);

(c) Oil core making (EU410);

(d) Core wash and Tower core oven (EU730).

(7) Pouring (EU540) and Cooling (EU550) processed metal, using no control, and exhausting to FG-INT1.

(8) Inoculation process, identified as EU140, utilizing no control, and exhausting to SU-INT2.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) BTU per hour.

(b) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(c) The following equipment related to manufacturing activities not resulting in the emission of HAPs; brazing equipment, cutting torches, soldering equipment, welding equipment.

(d) Closed loop heating and cooling systems.

(e) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(g) Heat exchanger cleaning and repair.

(h) Paved and unpaved roads and parking lots with public access.

(i) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

(j) Filter or coalescer media change out.

(k) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C.

(l) A laboratory as defined in 326 IAC 2-7-1(20)(C).

(m) Other activities or categories not previously identified with emissions equal to or less than specific thresholds:
1. Unit 610 - (1) Spin Blast
2. Unit 620 - (1) Tumble Blast
3. Unit 630 - (1) Tumbler
4. Unit 640 - Snag Grinders
5. Unit 650 - Finish Grinding
6. Unit 780 - Storage Piles

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

1. OP 07-3321-01-92, issued on January 1, 1992;
2. OP 07-3321-02-92, issued on January 1, 1992;
3. OP 07-3321-03-95, issued on August 21, 1995;
4. CP 167-V022-00007, issued on July 16, 1997; and
5. CP 167-V031-00007, issued on June 24, 1998.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

1. CP 167-V022-00007, issued on July 16, 1997

   The part of the Construction Condition number 16 requiring quarterly reporting of inspections and visible emission notations.

   Reason not incorporated: It was determined that the log being kept on site and available would be sufficient to document compliance and that nothing was actually gained by requiring the extra submittals.

2. OP 07-3321-02-92, issued on January 1, 1992

   A calculation error converting from grains per dry standard cubic feet to pounds per hour was corrected.

Enforcement Issue

All Enforcement actions have been resolved, at this time there are no Enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on May 31, 1996. Additional information was received on March 19, 1997 and March 6, 1998. In addition, the two construction permits that were issued after the submission of the application have been incorporated into the application.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	greater than 250
PM-10	greater than 250
SO_2	less than 100
VOC	greater than 100, less than 250
CO	greater than 250
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Lead	greater than 10
TOTAL	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10, VOC, and CO are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1998 VCAPC and OAM emission data.

Pollutant	Actual Emissions (tons/year)
PM	46.920
PM-10	28.774
SO_2	5.088
VOC	10.486
CO	576.105
NO_x	0.558
HAP (specify)	

County Attainment Status

The source is located in Vigo County.

Pollutant	Status
PM-10	Attainment
SO_2	Maintenance Attainment
NO_2	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM-10, VOC, and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-1 (Particulate Emissions Limitations)

Even though Vigo County is currently not a nonattainment area for particulate matter, it is still a listed county under 326 IAC 6-1-7. As such, the general nonattainment area provisions under 326 IAC 6-1-2 and the specific source requirements under 326 IAC 6-1-13 are still applicable.

Pursuant to 326 IAC 6-1-2(a), the Permittee shall not allow or permit discharge to the atmosphere of any gases which contain particulate matter in excess of 0.03 grain per dry standard cubic foot. This limitation can be relaxed by specific limitations in other areas of 326 IAC 6-1, but only for the specified facilities.

Pursuant to 326 IAC 6-1-2(e), the Grey Iron Foundries shall be limited as follows:

1. The Permittee shall not allow or permit from any cupola the discharge into the atmosphere any gases containing a particulate matter content greater than 0.15 grain per dry standard cubic foot.
2. The Permittee shall not allow or permit (from any other type of melting process other than cupola) the discharge into the atmosphere any gases containing a particulate matter content greater than 0.07 grain per dry standard cubic foot.

Pursuant to 326 IAC 6-1-13, the cupola at Gartland Foundry is limited to an particulate matter emission rate of no more than 0.15 grains per dry standard cubic foot and a total particulate matter emitted limitation of 112.5 tons per year.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the various facilities shall be limited by the following equations:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The control equipment shall be in operation at all times the specific facility is in operation, if it is needed in order to comply with this limit. These will be identified in the Permit itself.

Existing Permits (Particulate Matter)

The following conditions were pulled from existing permits.

(a) Pursuant to OP 07-3321-01-92, issued on January 1, 1992, the particulate matter (PM) emissions from Electric Induction Furnace #1 and #2 shall be limited 3.15 pounds per hour, and 13.80 tons per year.

(b) Pursuant to OP 07-3321-02-92, issued on January 1, 1992, the particulate matter (PM) emissions from BH3 controlling emissions from the shakeout operation shall be limited to 0.03 grains per dry standard cubic foot at an air flow rate of 22,500 cubic feet per minute, which is equivalent to 5.78 pounds per hour and 25.34 tons per year. The baghouse controlling emissions from the shakeout operation shall be in operation at all times that the shakeout operation is in operation.

(c) Pursuant to OP 07-3321-03-95, issued on August 21, 1995, the particulate matter (PM) emissions from Electric Induction Furnaces #3 and #4 shall be limited to 0.02 grains per

dry standard cubic foot at an air flow rate of 20,000 cubic feet per minute, which is equivalent to 2.98 pounds per hour, and 13.04 tons per year. The baghouse controlling emissions from these furnaces shall be in operation at all times that Furnaces #3 and #4 are in operation. Additionally, the charge materials for these furnaces must be stored indoors and visible emissions from any building opening shall not exceed 20% opacity.

(d) Pursuant to CP 167-V022-00007, issued on July 16, 1997, the particulate matter (PM) emissions from baghouse BH-5, controlling emissions from the sand muller, sand conveyor, and various other operations, shall be limited to 0.0075 grains per dry standard cubic foot at an air flow rate of 50,000 cubic feet per minute, which is equivalent to 3.21 pounds per hour, and 14.08 tons per year. The baghouse controlling emissions from these facilities shall be in operation at all times that any of these facilities are in operation.

(e) The PM from existing Spray Booth EU710 shall not exceed the emission rate of 0.551 pounds per hour. In order to comply with this limit, the dry filters shall be in place at all times that the spray booth is in operation.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the prime paint line (EU710) shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

326 IAC 9 (Carbon Monoxide Emission Limits)

This rule applies to sources of CO commencing operation after March 21, 1972. This source commenced operation prior to 1968, therefore, this rule does not apply.

326 IAC 11-1 (Particulate Matter Emissions Limitations for Existing Foundries)

Pursuant to 326 IAC 11-1-2 and OP 07-3321-01-92, issued on January 1, 1992, the particulate matter emissions from the foundry cupola shall be limited to 25.68 pounds per hour. The scrubber controlling emissions from the cupola shall be in operation at all times that the cupola is in operation, in order to comply with this limit.

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM and VCAPC, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(1) The cupola has applicable compliance monitoring conditions as specified below:

(a) Daily visible emissions notations of the cupola scrubber stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

(b) The Permittee shall record the total static pressure drop across the scrubber controlling the cupola, at least once per shift when the cupola is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the scrubber shall be maintained within the range of 55.0 to 60.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

(c) The Permittee shall keep daily records of the scrubbing liquid flow rate.

(d) The Permittee shall also periodically stack test to determine the actual emission rates to verify compliance.

These monitoring conditions are necessary because the scrubber for the cupola because it must operate properly to ensure compliance with 326 IAC 6-1 (Particulate Matter Emissions) and 326 IAC 11-1 (Particulate Matter Emissions Limitations for Existing Foundries).

(2) Electric Induction Furnaces #1, #2, #3 and #4 have applicable compliance monitoring conditions as specified below:

(a) Daily visible emissions notations of the Electric Induction Furnace stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

(b) The Permittee shall record the total static pressure drop across the baghouse controlling Furnaces #3 and #4, at least once per shift when the Furnaces are in operation. Unless operated under conditions for which the Preventive

Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouse for the Furnaces because they must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Matter Emissions) and 326 IAC 2-2 (PSD).

3. The Sand Muller has applicable compliance monitoring conditions as specified below:

(a) Daily visible emissions notations of the Sand Muller stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

(b) The Permittee shall record the total static pressure drop across the baghouse controlling the Sand Muller, at least once per shift when the Sand Muller is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouse for the Sand Muller because it must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Matter Emissions) and 326 IAC 2-2 (PSD).

4. The Casting Shakeout has applicable compliance monitoring conditions as specified below:

(a) Daily visible emissions notations of the Sand Muller stack exhaust shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

(b) The Permittee shall record the total static pressure drop across the baghouse controlling the Casting SHakeout, at least once per shift when the Casting Shakeout is in operation. Unless operated under conditions for which the

Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouse for the Casting Shakeout because it must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Matter Emissions) and 326 IAC 2-2 (PSD).

5. The Spray Booth has applicable compliance monitoring conditions as specified below:

   (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray while the spray booth is in operation.
   (b) Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground.

   These monitoring conditions are necessary to ensure compliance with 326 IAC 6-3 (Particulate Matter Emissions) and 326 IAC 2-2 (PSD).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of this grey iron foundry shall be subject to the conditions of the attached proposed **Part 70 Permit No. T167-5998-00007.**

Gartland Foundry Company
330 Grant Street, Terre Haute, Indiana 47802
Part 70 Permit Number: T167-5998
Plant ID Number: 167-00007
Reviewer: Rob Harmon VCAPC
Date: April 11, 2000

Charge Handling

19 Cupola Scrap/Charge Handling (EU100) (tons per hour)
19 Electric Induction Furnace Scrap/Charge handling (EU120) (tons per hour)
38 Total Tons per hour

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Scrap and Charge	38	PM	0.60	99.86			99.86
Handling		PM-10	0.36	59.92			59.92
Source of Criteria		SO2	0.00	0.00			0.00
Pollutant Factors:		NOx	0.00	0.00			0.00
SCC# 3-04-003-15		VOC	0.00	0.00			0.00
FIRE 6.01		CO	0.00	0.00			0.00
AP-42 Ch. 12.10		chromium	2.3E-04	0.04			3.8E-02
Fifth edition 1995		cobalt	2.0E-05	0.00			3.3E-03
		nickel	4.0E-04	0.07			6.7E-02
		arsenic	8.0E-05	0.01			1.3E-02
		cadmium	4.0E-05	0.01			6.7E-03
		selenium	1.0E-05	0.00			1.7E-03
		Lead	2.3E-03	0.38			3.8E-01

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Cupola Furnace

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Cupola	11.2	PM	13.8	676.97	scrubber SCR	99.00%	6.77
		PM-10	12.4	608.29	scrubber SCR	99.00%	6.08
Source of Criteria		SO2	1.25	61.32			61.32
Pollutant Factors:		NOx	0.1	4.91			4.91
FIRE 6.01		VOC	0.18	8.83			8.83
EPA SCC# 3-04-003-01		CO	145	7113.12			7113.12
AP-42 Ch. 12.10		chromium	7.2E-03	0.35	scrubber SCR	99.00%	3.5E-03
Fifth edition 1995		cobalt	5.5E-04	0.03	scrubber SCR	99.00%	2.7E-04
		nickel	4.8E-03	0.24	scrubber SCR	99.00%	2.4E-03
		arsenic	1.8E-03	0.09	scrubber SCR	99.00%	8.8E-04
		cadmium	0.0E+00	0.00	scrubber SCR	99.00%	0.0E+00
		selenium	2.8E-04	0.01	scrubber SCR	99.00%	1.4E-04
		Lead	3.2E-02	1.56	scrubber SCR	99.00%	1.6E-02
		phenol	1.2E-02	0.57			5.7E-01
		benzene	6.2E-02	3.06			3.1E+00
		formaldehyde	1.3E-03	0.06			6.2E-02
		xylene	2.2E-02	1.06			1.1E+00
		toluene	2.5E-02	1.25			1.2E+00

Gartland Foundry Company
330 Grant Street, Terre Haute, Indiana 47802
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Electric Induction Furnaces

5 Induction Furnace #3 (EU130) (tons of metal per hour)
5 Induction Furnace #4 (EU140) (tons of metal per hour)
10 Total tons of metal per hour

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Melting - Electric	10	PM	0.90	149.80	Baghouse BH1	0.98	3.00
Induction Furnace		PM-10	0.86	143.14	Baghouse BH1	0.98	2.86
Source of Criteria		SO2	0.00	0.00			0.00
Pollutant Factors:		NOx	0.00	0.00			0.00
EPA SCC# 3-04-003-03		VOC	0.00	0.00			0.00
FIRE 6.01		CO	0.00	0.00			0.00
AP-42 Ch. 12.10		chromium	2.3E-04	0.04	Baghouse BH1	0.98	7.7E-04
Fifth edition 1995		cobalt	2.0E-05	0.00	Baghouse BH1	0.98	6.7E-05
		nickel	4.0E-04	0.07	Baghouse BH1	0.98	1.3E-03
		arsenic	8.0E-05	0.01	Baghouse BH1	0.98	2.7E-04
		cadmium	4.0E-05	0.01	Baghouse BH1	0.98	1.3E-04
		manganese	2.3E-02	3.74	Baghouse BH1	0.98	7.5E-02
		selenium	1.0E-05	0.00	Baghouse BH1	0.98	3.3E-05
		Lead	9.0E-03	1.50	Baghouse BH1	0.98	3.0E-02

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Inoculation

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Magnesium Treatment	10	PM	1.80	78.84			78.84
Source of Criteria		PM-10	1.80	78.84			78.84
Pollutant Factors:		SO2	0.00	0.00			0.00
FIRE 6.01		NOx	0.00	0.00			0.00
SCC# 3-04-003-21		VOC	0.01	0.22			0.22
AP-42 Ch 12.10		CO	0.00	0.00			0.00
Fifth edition 1995		Lead	0.04	1.86			1.86

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Pouring

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Pouring/Casting	18.0	PM	4.20	331.13			331.13
Source of Criteria		PM-10	2.06	162.41			162.41
Pollutant Factors:	FIRE 5.0	SO2	0.02	1.58			1.58
FIRE 6.01	FIRE 5.0	NOx	0.01	0.79			0.79
SCC# 3-04-003-18	FIRE 5.0	VOC	0.14	11.04			11.04
(except as noted)		CO	---	0.00			0.00
		chromium	1.6E-03	0.13			1.3E-01
		cobalt	1.3E-04	0.01			1.0E-02
		nickel	2.8E-03	0.22			2.2E-01
		arsenic	5.5E-04	0.04			4.3E-02
		cadmium	2.5E-04	0.02			2.0E-02
		selenium	4.0E-05	0.00			3.2E-03
		Lead	1.6E-02	1.27			1.3E+00

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Cooling

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Castings Cooling	18.0	PM	1.40	110.38	none		110.38
Source of Criteria		PM-10	1.40	110.38	none		110.38
Pollutant Factors:		SO2	0.00	0.00			0.00
FIRE 6.01		NOx	0.00	0.00			0.00
SCC# 3-04-003-25		VOC	0.00	0.00			0.00
		CO	---	0.00			0.00
		Lead	---	0.00			0.00

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Casting Shakeout

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Castings Shakeout	8.0	PM	3.20	112.13	Baghouse BH3	98.00%	2.24
Source of Criteria		PM-10	2.24	78.49	Baghouse BH3	98.00%	1.57
Pollutant Factors:		SO2	0.00	0.00			0.00
FIRE 6.01		NOx	0.00	0.00			0.00
SCC# 3-04-003-31		VOC	1.20	42.05			42.05
AP-42 Ch. 12.10		CO	---	0.00			0.00
Fifth edition 1995		chromium	1.2E-03	0.04	Baghouse BH3	98.00%	8.5E-04
		cobalt	1.0E-04	0.00	Baghouse BH3	98.00%	7.0E-05
		nickel	2.1E-03	0.07	Baghouse BH3	98.00%	1.5E-03
		arsenic	4.2E-04	0.01	Baghouse BH3	98.00%	2.9E-04
		cadmium	1.9E-04	0.01	Baghouse BH3	98.00%	1.3E-04
		selenium	3.0E-05	0.00	Baghouse BH3	98.00%	2.1E-05
		Lead	1.2E-02	0.43	Baghouse BH3	98.00%	8.6E-03

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Mold Making

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Mold Making	18	PM	0.90	70.96	none		70.96
Source of Criteria		PM-10	0.90	70.96	none		70.96
Pollutant Factors:		SO2	0.00	0.00	none		0.00
FIRE 6.01		NOx	0.50	39.42	none		39.42
SCC# 3-04-003-53		VOC	---	0.00	none		0.00
		CO	---	0.00	none		0.00
		Lead	---	0.00	none		0.00

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Sand Handling Systems

100 Sand Muller (EU591) (tons of sand per hour)
2.2 Waste Sand Handling System (EU760) (tons of sand per hour) [without control]
8 Shaker/Sorter unit (EU580) (tons of sand per hour)
110.2 Total Sand Handling (tons of sand per hour)

Process:	Rate (tons sand/hr	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Sand Handling	108	PM	3.6	1702.9	Baghouse BH5	98.00%	34.1
Source of Criteria		PM-10	0.54	255.4	Baghouse BH5	98.00%	5.1
Pollutant Factors:							
FIRE 6.01	2.2	PM	3.6	34.7	none		34.7
EPA SCC# 3-04-003-50		PM-10	0.54	5.2	none		5.2

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Casting Finishing

5 Spin Blast (EU610) (tons per hour castings) [BH2]
5 Tumble Blast (EU620) (tons per hour castings) [BH5]
1 Tumbler (EU630) (ton per hour castings) [BH5]
8 Four Snag Grinders (EU640) (@2 tons per hour castings each) [BH5]
12 Six Finish Grinders (EU650) (@2 tons per hour castings each) [BH5]
31 Total Casting Finishing (tons per hour) [BH5]

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Castings Cleaning	31.000	PM	17.00	2308.26	baghouse	98.00%	46.17
and Finishing		PM-10	1.70	230.83	baghouse	98.00%	4.62
Source of Criteria		SO2	0.00	0.00			0.00
Pollutant Factors:		NOx	0.00	0.00			0.00
FIRE 6.01		VOC	0.00	0.00			0.00
SCC# 3-04-003-40		CO	0.00	0.00			0.00
AP-42 Ch. 12.10		chromium	6.5E-03	0.88	baghouse	98.00%	1.8E-02
Fifth edition 1995		cobalt	5.1E-04	0.07	baghouse	98.00%	1.4E-03
		nickel	1.1E-02	1.55	baghouse	98.00%	3.1E-02
		arsenic	2.2E-03	0.30	baghouse	98.00%	6.0E-03
		cadmium	1.0E-03	0.14	baghouse	98.00%	2.8E-03
		selenium	1.7E-04	0.02	baghouse	98.00%	4.6E-04
		Lead	4.5E-03	0.61	baghouse	98.00%	1.2E-02

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Core Making Systems

3	Three Shell Core machines (EU320, EU321, and EU322) (@1 ton per hour of sand each)
6	Three Isocure Core machines (EU220, EU221, and EU222) (@2 tons per hour of sand each inc. mixer)
0.25	Oil Core machine (EU410) (tons per hour of sand)
1	Core Wash Process (EU730) (ton per hour of sand)
10.25	Total Core Making Systems (tons per hour of sand)

Process:	Rate (tons iron/hr)	Pollutant	Ef (lb/ton produc	Ebc (ton/yr)	Type of control	Control Efficiency (%)	Eac (ton/yr)
Core Making (ovens)	18	PM	0.90	70.96	none		70.96
Source of Criteria		PM-10	0.90	70.96	none		70.96
Pollutant Factors:		SO2	0.00	0.00	none		0.00
FIRE 6.01		NOx	0.50	39.42	none		39.42
SCC# 3-04-003-53		VOC	---	---	none		---
		CO	---	0.00	none		0.00
		Lead	---	0.00	none		0.00

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Spray Booth

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Grey Primer	9.7	62.00%	52.2%	9.8%	60.7%	26.10%	0.01000	500	2.42	0.95	4.75	114.07	20.82	28.25	3.64	65%
Red Oxide	9.9	46.30%	37.9%	8.4%	45.3%	43.00%	0.01000	500	1.52	0.83	4.16	99.79	18.21	40.75	1.93	65%
Reliance Green	9.7	64.80%	54.6%	10.2%	61.4%	25.20%	0.01000	500	2.56	0.99	4.95	118.73	21.67	26.17	3.93	65%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%

State Potential Emissions **Add worst case coating to all solvents** **4.95** **118.73** **21.67** **40.75**

After Dry Filters: 0.41

(assuming 99% efficient)

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

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Emissions Before Control

	PM	PM10	SO2	NOx	VOC	CO	Lead	chromium	cobalt	nickel	arsenic	cadmium	selenium
Scrap and Charge Handling	99.86	59.92	0.00	0.00	0.00	0.00	0.38	0.04	0.00	0.07	0.01	0.01	0.00
Cupola Furnace	676.97	608.29	61.32	4.91	8.83	7113.12	1.56	0.35	0.03	0.24	0.09	0.00	0.01
Electric Induction Furnace	149.80	143.14	0.00	0.00	0.00	0.00	1.50	0.04	0.00	0.07	0.01	0.01	0.00
Inoculation	78.84	78.84	0.00	0.00	0.22	0.00	1.86						
Pouring	331.13	162.41	1.58	0.79	11.04	0.00	1.27	0.13	0.01	0.22	0.04	0.02	0.00
Cooling	110.38	110.38	0.00	0.00	0.00	0.00	0.00						
Casting Shakeout	112.13	78.49	0.00	0.00	42.05	0.00	0.43	0.04	0.00	0.07	0.01	0.01	0.00
Mold Making	70.96	70.96	0.00	39.42	0.00	0.00	0.00						
Sand Handling Systems	1737.63	260.65											
Casting Finishing	2308.26	230.83	0.00	0.00	0.00	0.00	0.61	0.88	0.07	1.55	0.30	0.14	0.02
Core Making Systems	70.96	70.96	0.00	39.42	---	0.00	0.00						
Spray Booth	40.75	40.75			21.67								
Total (ton/yr)	5787.66	1915.60	62.90	84.53	83.80	7113.12	7.62	1.47	0.12	2.21	0.47	0.18	0.04

Other HAP emissions (listed seperately since they only occurred from a single process)

0.57 Phenol emissions from the Cupola
3.06 Benzene emissions from the Cupola
0.06 Formaldehyde emissions from the Cupola
1.06 Xylene emissions from the Cupola
1.25 Toluene emissions from the Cupola
3.74 Manganese emissions from the Electric Induction Furnaces

14.24 Total combined HAP emissions before control

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Emissions After Control

	PM	PM10	SO2	NOx	VOC	CO	Lead	chromium	cobalt	nickel	arsenic	cadmium	selenium
Scrap and Charge Handling	99.86	59.92	0.00	0.00	0.00	0.00	0.38	0.038	0.003	0.067	0.013	0.007	0.002
Cupola Furnace	6.77	6.08	61.32	4.91	8.83	7113.12	0.02	0.004	0.000	0.002	0.001	0.000	0.000
Electric Induction Furnace	3.00	2.86	0.00	0.00	0.00	0.00	0.03	0.001	0.000	0.001	0.000	0.000	0.000
Inoculation	78.84	78.84	0.00	0.00	0.22	0.00	1.86						
Pouring	331.13	162.41	1.58	0.79	11.04	0.00	1.27	0.126	0.010	0.222	0.043	0.020	0.003
Cooling	110.38	110.38	0.00	0.00	0.00	0.00	0.00						
Casting Shakeout	2.24	1.57	0.00	0.00	42.05	0.00	0.01	0.001	0.000	0.001	0.000	0.000	0.000
Mold Making	70.96	70.96	0.00	39.42	0.00	0.00	0.00						
Sand Handling Systems	68.75	10.31											
Casting Finishing	46.17	4.62	0.00	0.00	0.00	0.00	0.01	0.018	0.001	0.031	0.006	0.003	0.000
Core Making Systems	70.96	70.96	0.00	39.42	---	0.00	0.00						
Spray Booth	0.41	0.41			21.67								
	889.45	579.31	62.90	84.53	83.80	7113.12	3.59	0.187	0.015	0.324	0.064	0.029	0.005

Other HAP emissions (listed seperately since they only occurred from a single process)

0.57 Phenol emissions from the Cupola
3.06 Benzene emissions from the Cupola
0.06 Formaldehyde emissions from the Cupola
1.06 Xylene emissions from the Cupola
1.25 Toluene emissions from the Cupola
3.74 Manganese emissions from the Electric Induction Furnaces

10.37 Total combined HAP emissions after control